ASEM Science and Technology Ministers' Meeting
Beijing 14-15 October, 1999

Chairman's Statement

I. Introduction

1. The ASEM Science and Technology Ministers' Meeting (STMM) was held in Beijing, China on 14-15 October 1999 and was attended by Ministers or their representatives responsible for science and technology (S&T) issues from the ten Asian and the fifteen European countries of ASEM, namely, Austria, Belgium, Brunei Darussalam, China, Denmark, Finland, France, Germany, Greece, Indonesia, Ireland, Italy, Japan, Korea (Republic of), Luxembourg, Malaysia, the Netherlands, the Philippines, Portugal, Singapore, Spain, Sweden, Thailand, United Kingdom, Viet Nam, and representatives from the European Commission. The list of participants is attached as annex 1. The meeting was chaired by H.E. Mme. ZHU Lilan, Minister of Science and Technology of China.

2. Chinese Premier H.E. ZHU Rongji delivered a speech at the meeting. In his address, Premier Zhu emphasized the necessity to further explore the potential of S&T cooperation between Asia and Europe. He hopes that an effective cooperation mechanism could be established within the ASEM framework, and that the cooperation could make its due contribution eventually to the ASEM process.

3. Aiming at setting a course for joint action by Asian and European partners in key areas of science and technology interest, both for the present and for the future, Ministers discussed a wide range of issues under the STMM agenda.

II. Background

4. The inaugural Asia-Europe Meeting (ASEM 1) held in Bangkok recognised the key role of intensified science and technology cross-flows in strengthening economic links between Asia and Europe. Soon after ASEM 1, an Asia-Europe Experts' Meeting on Technological Cooperation took place in Beijing (April 1997) to explore the potential for strengthening S&T cooperation amongst ASEM partners. The outcome of this meeting was a thematically more focused approach to dialogue and cooperation which recognised the links between S&T cooperation, sustainable economic growth and economic cooperation.

5. At the Second Asia-Europe Meeting (ASEM 2) held in London in 1998, a Ministers' Meeting on S&T cooperation was proposed by China, and this proposal was subsequently supported by the ASEM partners. Two preparatory meetings (Beijing, November 1998 and Brussels, March 1999) and a series of thematic working papers paved the way for the Ministers' Meeting.

III. The global setting for a new Asia-Europe dynamic in S&T

6. As scientific knowledge becomes critically associated in modern societies with social progress and economic growth, public authorities, private sector operators and civil society organisations endeavour to invest in knowledge generation and also in promoting its widespread use as a capital asset. This is an area where regional and inter-regional S&T cooperation mechanisms can excel in ensuring the unhindered flow of scientists and ideas in the spirit of universal scientific progress and discovery.

7. The pace of economic globalisation is accelerating and this is reflected in freer trade and investment flows. In this context science and technology knowledge becomes a key capital asset with important implications for the competitiveness of enterprises. The progressive segmentation of markets opens the door to SMEs' practising alternative approaches to the production and marketing of goods and services, emphasising a closer and higher quality relationship with the market segment, while drawing on knowledge generated internationally. As economic activities become more knowledge-intensive, research links with business are becoming more intimate.

8. S&T cooperation therefore becomes an important means to mobilise and involve public and

private sector resources, in Asia and in Europe, to address demand for knowledge by competitive enterprises or their partnerships.
9. Economic globalisation, combined with demographic growth and recent consumer trends, can be at the origin of environmental trans-boundary problems, regional or global. Addressing these problems, with a view to their prevention and/or mitigation, requires considerable inputs of knowledge, much of it originating in scientific research[In this connection, Ministers recognised the work of the Asia-Europe Environmental Technology Centre (AEETC) located in Thailand - a centre created by ASEM - in promoting cooperation in the field of environment and addressing these problems. The work of Asia-European Foundation (ASEF) was also noted]. Once again, S&T cooperation provides the scientific communities in Asia and Europe with the means to join their efforts, using their comparative advantages to achieve high levels of scientific efficiency and cost-effectiveness. In this way, regional complementarities are fully exploited through inter-regional cooperation, in a context where international quality standards increasingly internalise environmental and social costs.
10. Paradigm changes can also be observed in the scientific world, determining a growing demand for knowledge of relevance to society. The increasing complexity of societal organisation as well as the interdependence of societies world-wide create new problems as well as new opportunities for sustainable development and human progress. The international nature of the issues requires multi-faceted, multi-partner, cross-sectoral and trans-boundary approaches to research, which can only be achieved through S&T cooperation. These issues include national, regional and international policies (including Intellectual Property Rights), environmental management and the quality of life, as well as technologies specifically targeted to the ecological, socio-cultural and economic circumstances prevailing in the Asian and European regions.
11. Lastly, S&T cooperation is not limited to its knowledge outputs. Indeed, it is a privileged means of capitalising on human and institutional resources, two assets of critical importance to the continuing generation of strategically targeted research. Mutually beneficial knowledge acquired and shared by scientific partners about Asian and European societies, in what concerns their socio-political, economic and cultural aspects, fosters the trust and motivation for continuing cooperation. It also helps channel priorities for research and thus has a positive impact on economic, environmental and other societal consequences of S&T cooperation.
IV. The outlook for S&T cooperation in the 21st century
12. The ASEM Ministers for S&T, respecting the richness and diversity of each other's histories and cultures, wished by this Meeting to encourage further cooperation in science and technology. Building upon the wealth of past experience, and in the spirit of the Asia-Europe Cooperation Framework adopted at ASEM 2, they based their discussions on a set of commonly agreed principles, which should characterise and guide S&T cooperation between Asia and Europe, namely:
* a broad concept which includes human and institutional capital as well as the generation of scientific knowledge;
* an integrated approach, linked with other efforts to strengthen economic links as well as S&T between Asia and Europe;
* respect for equality in partnerships, mutual benefit and diversity, and
* a long-term perspective, rather than short-term considerations.
13. Ministers also recognized the growing importance of science and technology research in the development of a knowledge-based society, particularly in regional and global issues and the promotion of economic competitiveness. Bearing in mind the importance of creating enabling environments for voluntarily established partnerships of Asian and European public and private sector actors, Ministers asserted their vision for cooperation:
* as a long-term process aiming at scientific knowledge of relevance to sustainable development and economic growth in Asia and in Europe;

* as a driving force for investments in human, cultural and institutional capital in both regions; and
* as a multiple-actor instrument with the ability to promote multi-faceted cooperation involving relevant and interested stakeholders in society.

14. In this spirit, Ministers expressed their support to the process of enhancing cooperation involving relevant public and private actors, in order to increase efficiency in the use of existing and new instruments. Furthermore, Ministers encouraged initiatives to promote Asia-Europe S&T cooperation, including the transfer of knowledge and technologies targeted at solutions to economic and social problems with clear trans-boundary and inter-regional added value.

V. Opportunities & priorities

15. Ministers gave considerable attention to the background working papers prepared jointly by Asian and European partners. They considered that these papers provided useful analyses of priority issues and they were grateful to the authors and contributors for their significant joint effort to develop these ideas within a short time.

16. Ministers examined a number of areas in which they have common interests and priorities, on the basis of the Working Papers. They recognized the benefits of past and current cooperative activities in these sectors and encourage further developments, taking account of the priorities identified in the working papers. These areas are:

* Broad issues, including basic science, joint utilization of large-scale scientific facilities, knowledge transfer from research institutions/universities to industry and S&T human resource development;
* Agricultural S&T issues, including forestry, water management, agro-technology and agro-industry;
* Environmental protection issues, including sustainable cities, sustainable and clean production technologies, sustainable development of ecosystems and cultural heritage; and
* Upgrading of technical and research capabilities of enterprises.

17. Ministers considered that this set of priority areas for S&T cooperation provide ASEM partners with a good basis upon which to build future activities, and they took note of the proposals and possible actions mentioned in the working papers. They reaffirmed the long-term nature of S&T cooperation and the possibility that additional areas may replace and/or be added to these initial domains, reflecting future joint priorities to be established by the ASEM partners.

VI. Strategic goals

18. Analysis of the working papers led Ministers to conclude that certain common denominators are present in virtually all domains and represent therefore strategic elements in S&T cooperation between Asia and Europe. These elements were the object of open discussion by Ministers, particularly in relation to the need to enhance co-ordination between bilateral and inter-regional channels for cooperation.

19. In order to ensure effective S&T cooperation, Ministers identified the following important goals:

* To encourage the creation of new S&T networks between the two regions;
* To promote information and communication systems specifically designed to enhance S&T cooperation in target areas;
* To encourage S&T cooperation in the areas identified through the ASEM dialogue and promote wider dissemination of opportunities and results;
* To use their efforts to promote Asia-Europe networks of centres of excellence in key technologies as well as cooperation among university, industry and other public/private entities, including think tank and research groups, particularly through joint research programmes and projects, and the planning and implementation of joint post-graduate programmes and industrial experience;
* To facilitate scientific mobility through reciprocal arrangements, mobility grants, training programmes, etc.;

* To promote trans-boundary links for S&T and knowledge-based businesses (including technology centres) in Asia and Europe;
* To support efforts to increase the public awareness of S&T activities;
* To expand cooperation on technology transfer in Asia and Europe.

VII. Implementation

20. Ministers considered the modes of implementation of S&T cooperation, bearing in mind the need to promote direct communication between scientists and between their institutions. Ministers shared the view that the above objectives and activities should be pursued on a decentralised and voluntary basis to ensure both operational flexibility and effectiveness.

21. Furthermore, bearing in mind the need to reinforce and to monitor S&T cooperation between Asia and Europe, and in accordance with the general understanding among ASEM partners that ASEM need not be institutionalized, Ministers welcomed efforts by groups of ASEM partners to establish task forces to coordinate individual activities in the thematic priority areas to facilitate discussion among relevant ASEM partners.[In the spirit of the Beijing Ministerial Meeting, the French Minister, Claude Allegre, took the occasion to invite his Asian and European colleagues to an informal meeting on the theme "science and Society" in the autumn of 2000 in Paris, during the French Presidency of the European Union]. They also recognized the importance of general coordination and exchange of information being assured by S&T contacts in each partner, in line with the Asia-Europe Cooperation Framework.

22 Ministers encouraged relevant S&T senior officials from ASEM partners, in accordance with the ASEM process:
* to develop appropriate mechanisms for information and effective collaboration;
* to monitor and document the progress of ongoing activities;
* to identify and prepare new ones, if needed; and
* to strategically assess the opportunities for S&T cooperation and report on the outcome of this ASEM Science and Technology Ministers' Meeting to ASEM 3 to be held in Seoul in 2000, with a report on subsequent cooperation activities to be delivered via the ASEM SOM to ASEM 4 in 2002.